

Constellation Program Flight Test Methodology and Strategy

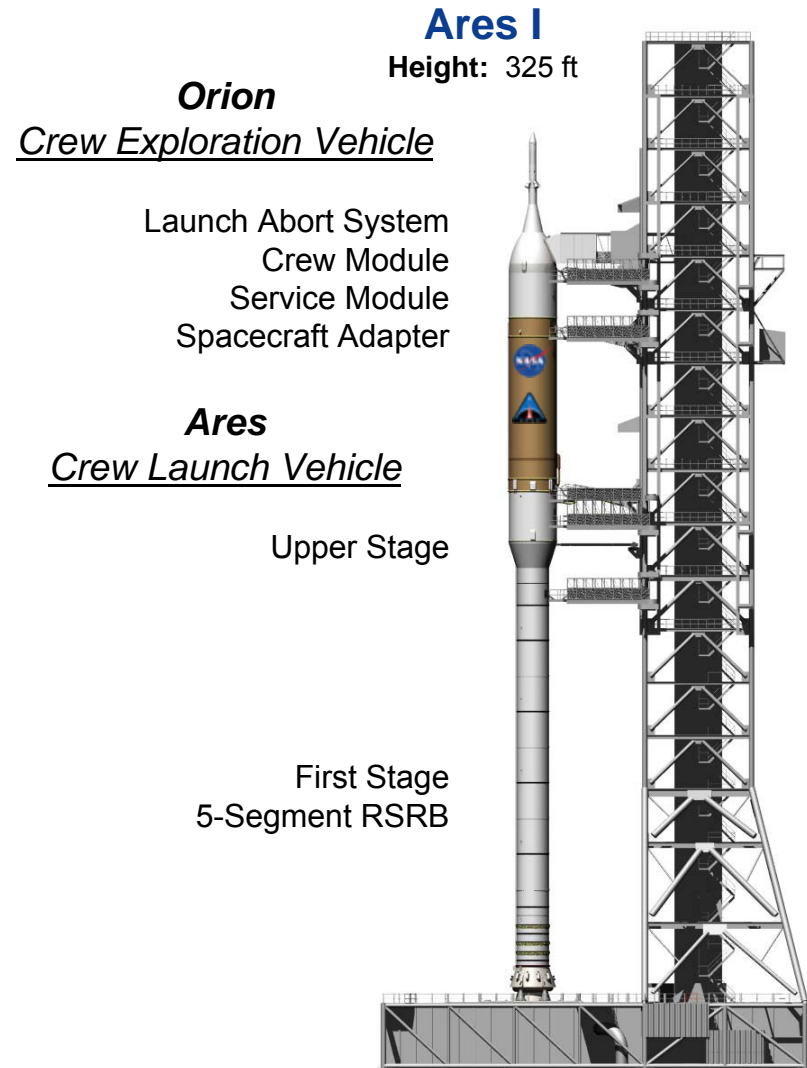


Art Vigil
Cx Test & Evaluation

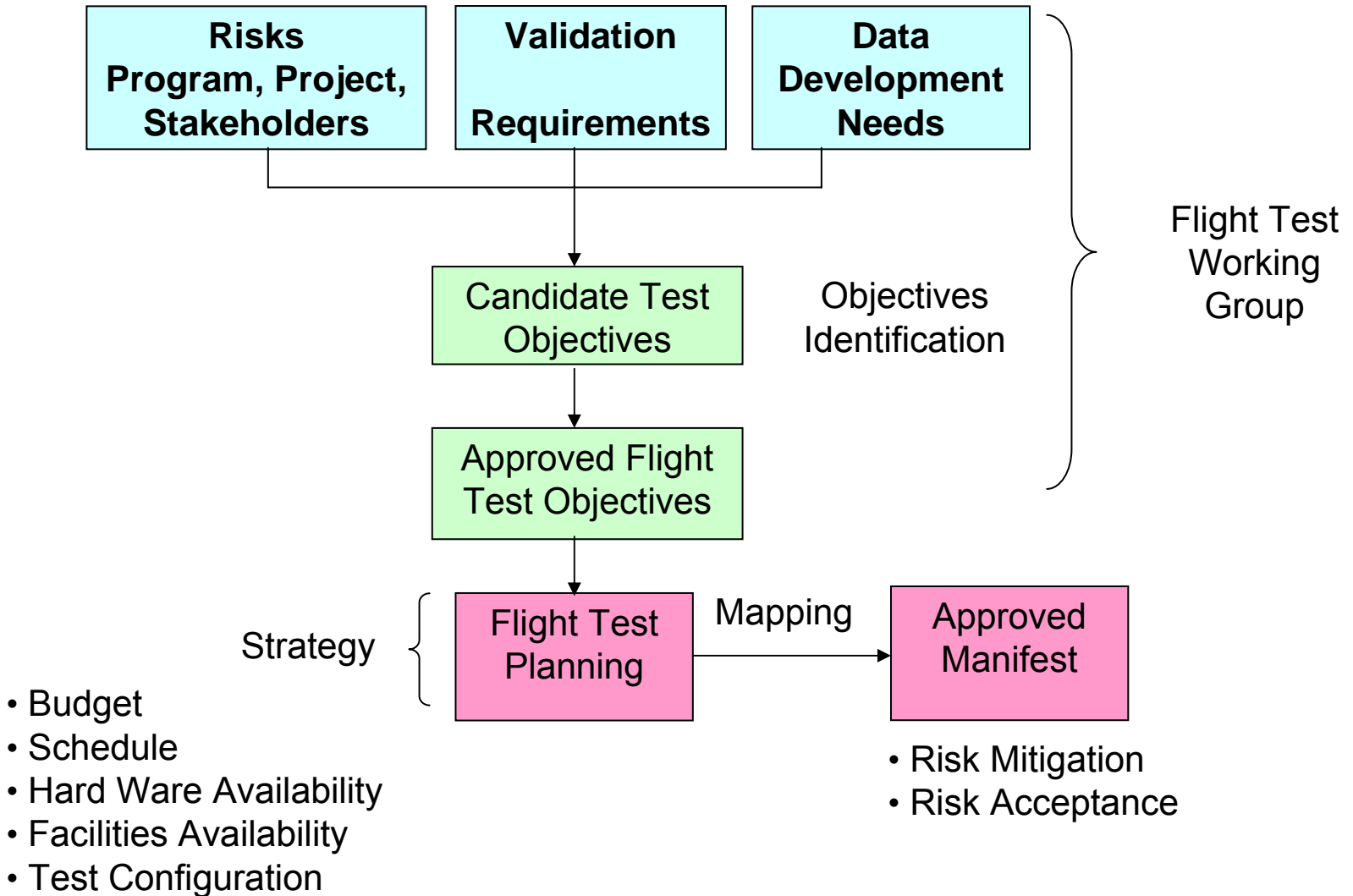
National Aeronautics and Space Administration
Johnson Space Center
CONSTELLATION

Constellation Program & Flight Testing

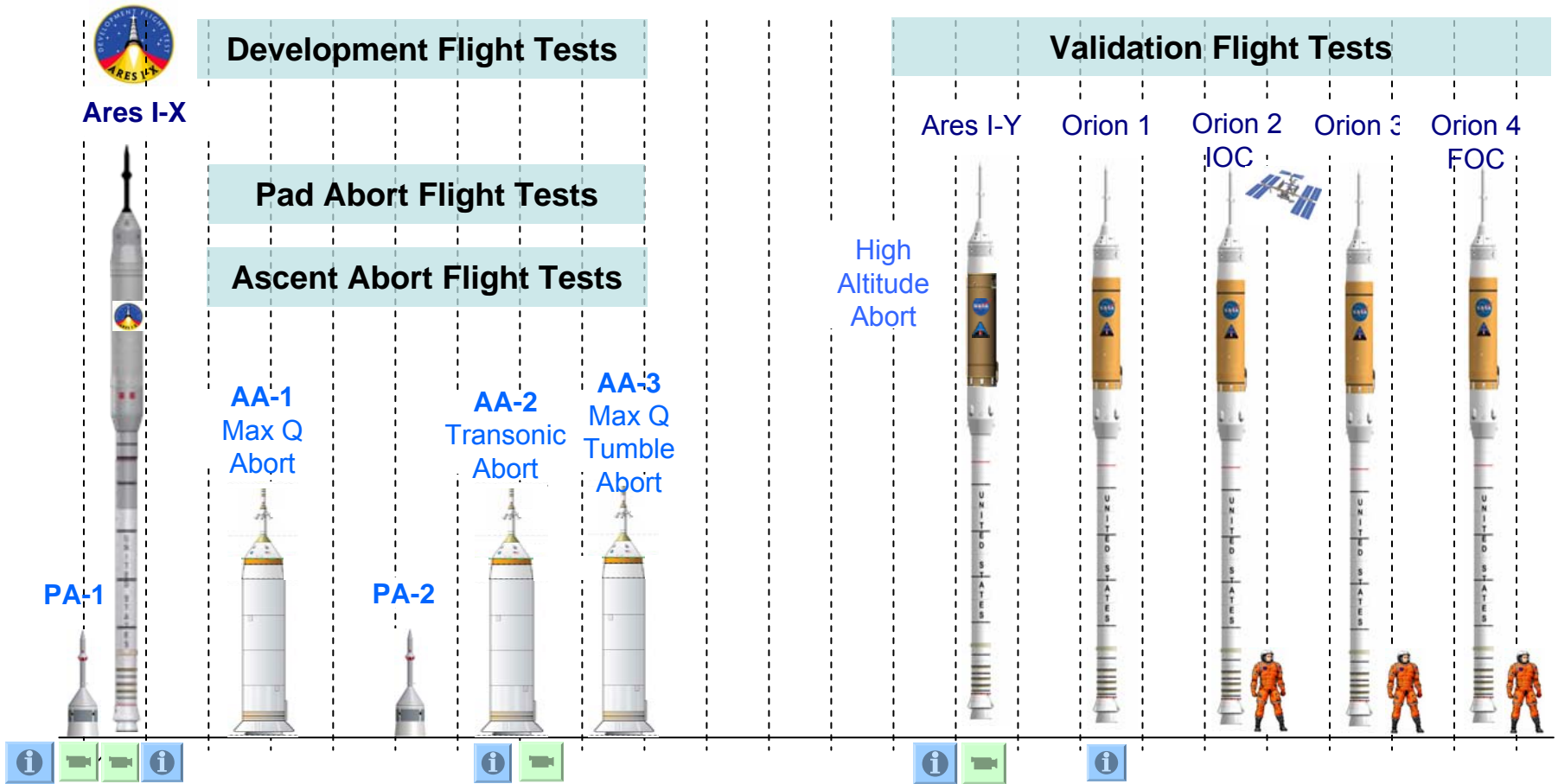
- **Main projects elements**
 - Orion & Ares
 - New & Modified heritage hardware
 - Shuttle retirement in 2010
- **Methodology**
 - Flight test objectives
 - Risk reduction
- **Strategy**
 - Mapping Flight Test Objectives
 - Build incremental capability



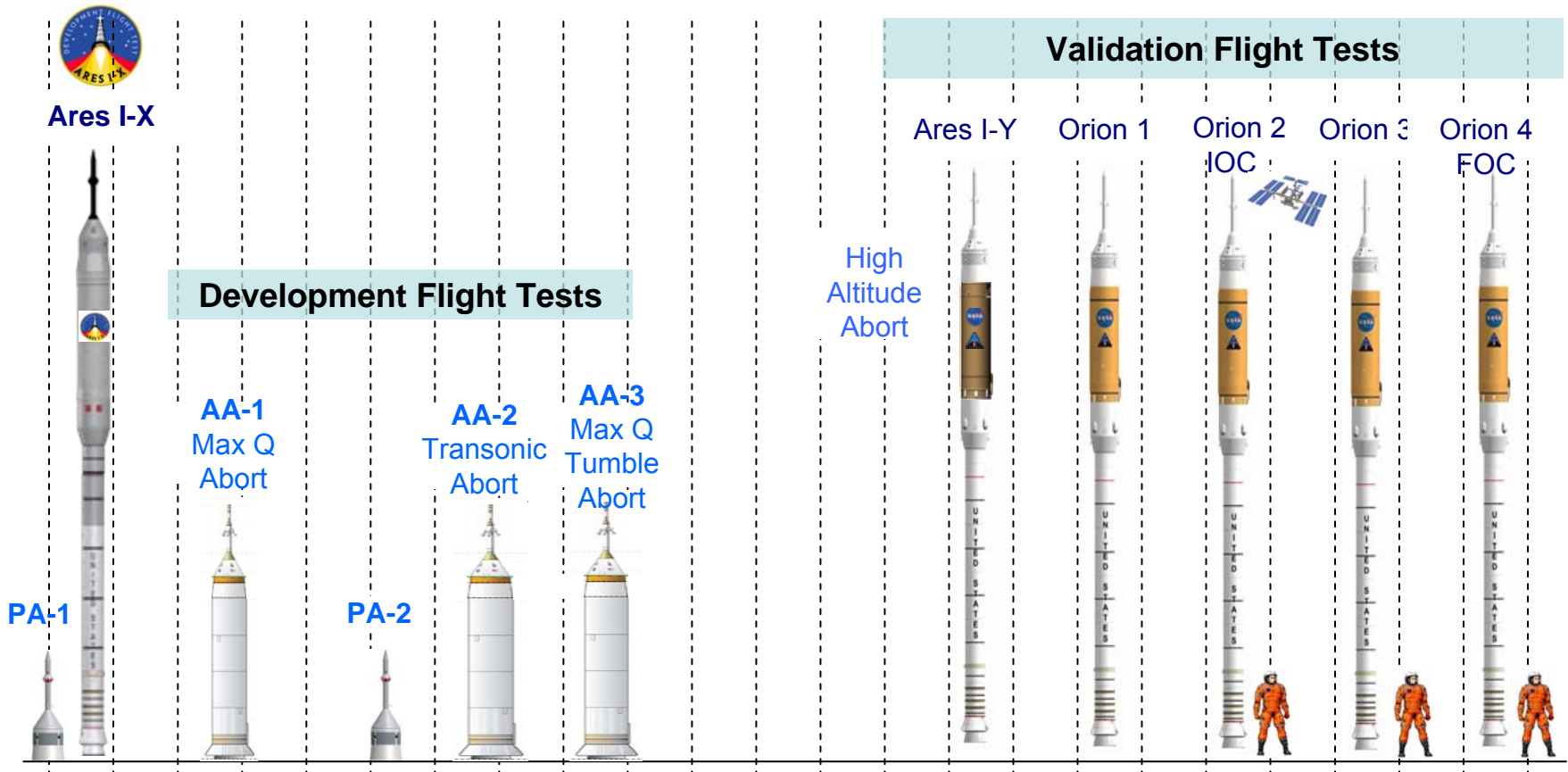
Methodology / Strategy



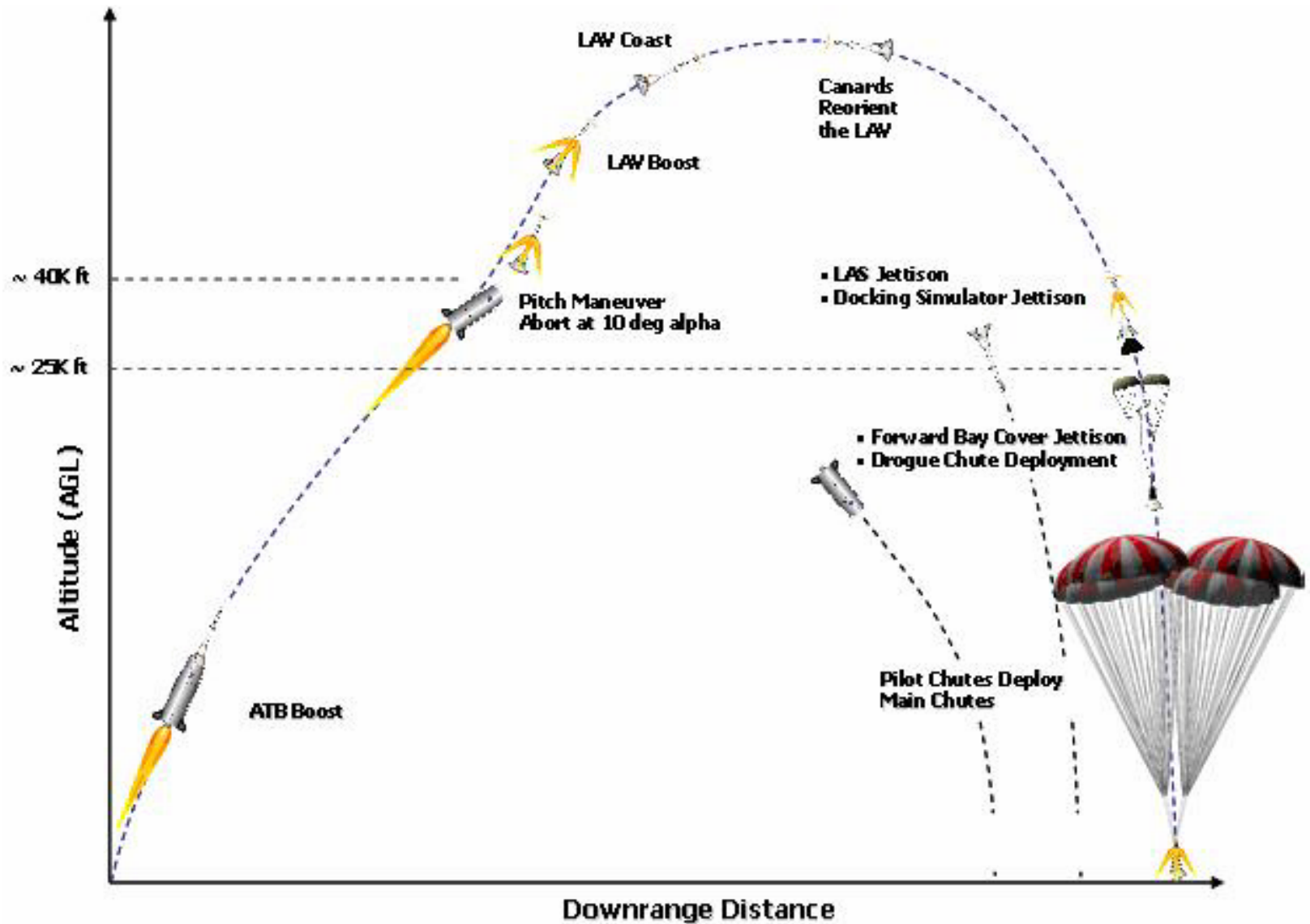
Constellation's Integrated Flight Test Strategy Manifest



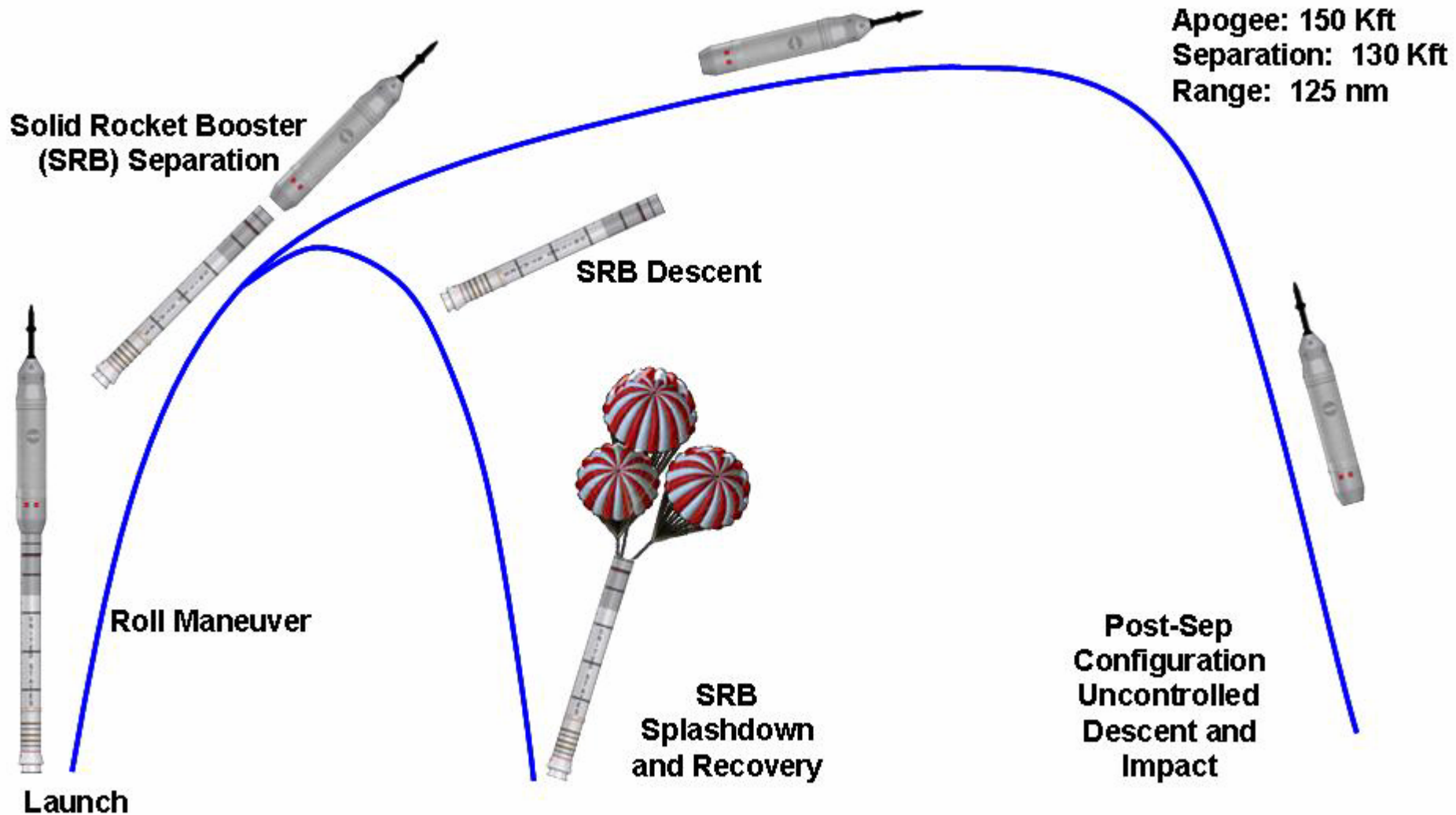
Constellation's Integrated Flight Test Strategy Manifest



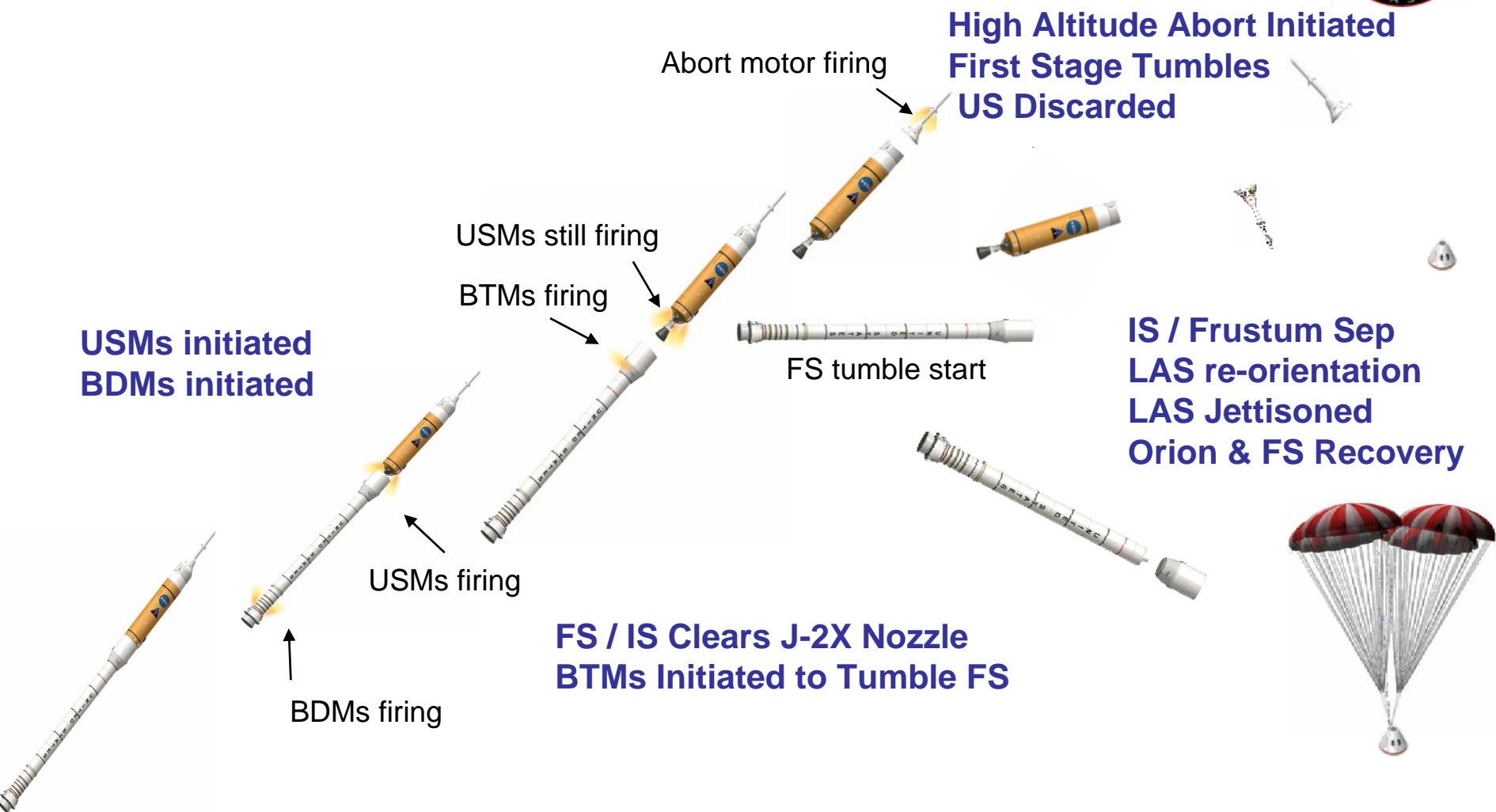
Ascent Abort Flight Test



Ares I-X Flight Test



Ares 1-Y High Altitude Abort Validation Flight Test illustration / Animation



- *Ullage Settling Motor (USM)*
- *Booster Deceleration Motor (BDM)*
- *Booster Tumble Motor (BTM)*